



U.S. ENVIRONMENTAL PROTECTION AGENCY

August 2002

## **Alder Mill Site Public Meeting**

The U.S. Environmental Protection Agency (EPA), the Washington State Department of Ecology, and the Okanogan County Health District invite you to a **public informational meeting**:

**Thursday, September 12, 2002**

**7:00 - 9:00 p.m.**

**Liberty High School Multi-Purpose Room**

**18 Twin Lakes Road**

**Winthrop, Washington**

The agencies are currently analyzing the spring 2002 test results from the abandoned Alder Mill site. They are determining whether the arsenic found in private drinking water wells occurs naturally in the environment, or if it is related to a discharge from the mill site or another source. EPA's Superfund program can only be used to cover costs from site-related contaminants. If the arsenic is found to occur naturally, EPA cannot pay for bottled water nor pay for drinking water tap treatment systems.

The agencies will talk about what the test results from the site mean, explain health risks from arsenic exposure, discuss drinking water tap treatment systems and other methods to eliminate or reduce arsenic, and answer any questions you may have.

For more information about this meeting, please call Debra Sherbina, EPA Community Involvement Coordinator, at 1-800-424-4372, extension 0247; e-mail: [sherbina.debra@epa.gov](mailto:sherbina.debra@epa.gov).

**Site Background**

In May 2001, The Okanogan County Health District, in cooperation with Ecology and EPA, found levels of arsenic above 10 parts per billion (ppb) in six private drinking water wells near Twisp, Washington. (In February 2002, EPA revised the standard for acceptable levels of arsenic in drinking water from 50 ppb to 10 ppb, to provide a higher level of protection).

To date, a total of 54 wells and two springs have been tested, revealing arsenic concentrations ranging from below detection limits to over 500 ppb. Nineteen homes were found with arsenic levels in their private drinking water wells measuring above 10 ppb. EPA has been temporarily supplying bottled water to these 19 residents, until tests could determine whether the arsenic was naturally-occurring or related to a discharge from the Alder Mill site or another site.

The Alder Mill site is an abandoned ore-concentrating mill for gold and copper. It is on a 75-acre plot just outside Twisp, Washington, next to the Methow River. Two ponds, covering about 10 acres of the site, were historically used to store wastewater and silt from the mill's operation. This disposal practice took place from 1949 until the mill was abandoned in 1952. An Ecology study indicates that surface soil at the mill site and mill ponds contains high levels of arsenic, lead and other metals.

**Recent Test Results**

This spring, the health district and EPA, in cooperation with Ecology, tested drinking water wells from a wide area around the mill site. The agencies also tested groundwater near the mill ponds, and did "leach tests" on tailings from the mill ponds. The tests were designed to discover whether arsenic was showing up where it would be expected if it were originating from the Alder mill, and whether material left at the mine site would be "mobile" in (move easily through) groundwater.

None of the tests showed a conclusive connection between arsenic in area wells and the mill site. Many tests, however, did find high arsenic levels upgradient and distant from the mill, where it would be unlikely for groundwater to travel from the mill site. Also, the agencies performed lab tests designed to simulate groundwater, called "leach tests." These leach tests showed that the mill pond arsenic is not very mobile in groundwater, indicating that the mill pond arsenic is not likely to be a significant contaminant source. Since the area has arsenic-rich geology, the agencies are currently reviewing this data to determine whether the arsenic in groundwater occurs naturally.

**Alder Mill Buildings to Come Down Later this Year**

EPA and the Alder Gold and Copper Company, the mill site owner, are working on a legal agreement called an "Agreed Order on Consent" to demolish the Alder Mill buildings and remove or cap the mill pond located next to them. Workers will safely dispose of materials in and around the buildings with high metals concentrations, such as lead, arsenic and cadmium. This work is needed to limit or eliminate exposure hazards to trespassers on the site, as well as limiting potential releases to the environment. The goal is to complete this work in late fall 2002.

**Limitations of the Superfund Program**

The Superfund can only be used to cover costs from site-related contaminants. If the arsenic in groundwater is found to be unrelated to a discharge from the abandoned mine site or another source, Superfund would not be able to pay the costs of bottled water, nor pay for drinking water tap treatment systems. EPA would need to stop distributing bottled water.

## **What You Can Do to Limit Your Exposure to Arsenic**

### **Drinking Water Tap Treatment Systems**

Residents can purchase small drinking water treatment systems for their taps, which would lower the arsenic to acceptable levels. Residents would need to maintain the treatment units yearly, which would cost about \$100. At the public meeting, we will discuss how these treatment systems work, and give some options for where you can purchase them. Tap treatment systems cost about \$1,000 each.

### **Bottled Water**

If EPA decides to stop providing bottled water, more information on options for continuing to purchase the water will be presented at the public meeting.

### **Educational Resources**

Education on risks associated with arsenic exposure will also be provided. For more information on arsenic exposure risks, please call Doug Hale of the Okanogan County Health District at **(509) 422-7140**, or toll-free (*within Okanogan County*): **1-800-222-6410**.

### **About Arsenic**

Arsenic is a naturally-occurring chemical element that is normally found in water, soil and rocks. Arsenic can also result from refining metals. To better protect public health, EPA has lowered the standard for arsenic in drinking water ("maximum contaminant level") from 50 parts per billion (ppb) to 10 ppb. Swallowing arsenic has been linked to increased risk of heart disease, diabetes, nervous system problems, digestive problems, and several forms of cancer. Long-term exposure to arsenic in drinking water has also been linked to immune system and neurological problems.

### **About Lead**

Lead also occurs naturally. Children are more sensitive to the effects of lead than adults. Swallowing lead can damage the brain and nervous system, leading to decreased intelligence and problems with behavior and learning. The impact lead has on a person is related to the total exposure from all sources, including contaminated soil and water, lead-based paint, and lead plumbing.

*For more information on the health effects of arsenic or lead, see the Agency for Toxic Substances and Disease Registry's fact sheets at: <http://www.atsdr.cdc.gov/toxprofiles>. For printed copies of these documents, please call Debra Sherbina at 1-800-424-4372, extension 0247, or e-mail [sherbina.debra@epa.gov](mailto:sherbina.debra@epa.gov).*

## **Contact Information**

### **EPA Contacts:**

*For technical questions about the site, please call*  
**Sean Sheldrake**, Project Manager at **(206) 553-1220**, E-mail: [sheldrake.sean@epa.gov](mailto:sheldrake.sean@epa.gov)

For more information on the upcoming public meeting or how to become involved, please call **Debra Sherbina**, Community Involvement Coordinator at **(206) 553-0247**, E-mail: [sherbina.debra@epa.gov](mailto:sherbina.debra@epa.gov)

You may also reach EPA through our toll free number: **1-800-424-4372**

### **County and State Contacts:**

Doug Hale, Okanogan County Health District **(509) 422-7140**, or toll-free (*within Okanogan County*): **1-800-222-6410**

Rick Roeder, Washington State Department of Ecology  
**(509) 454-7837**

**EPA's Internet homepage:** <http://www.epa.gov/r10earth>

A web page has been developed for the Alder Mill Site. Go to: <http://yosemite.epa.gov/r10/cleanup.nsf/sites/alder>

*Please contact one of the EPA numbers listed above by September 5 for large-print documents, sign language interpretation, and other services.*